REMARKS

In reply to the office action mailed October 13, 2006, Applicants amended claim 1 and cancelled claims 3, 4, 6-8, and 11-18. Applicants also amended the title, removing the word "Novel" as requested by the Examiner. Claims 1 and 9 are pending and under examination.

Claims 6, 8, 11 and 12 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. These claims are cancelled herewith, rendering moot the corresponding rejections.

Claims 3, 4, 6-8, and 11-16 were rejected under 35 U.S.C. 112, first paragraph, as lacking enablement. These claims are cancelled herewith, rendering moot the corresponding rejections.

Claims 1, 3, 4, 6-9, and 11-18 were rejected under 35 U.S.C. 112, first paragraph, as lacking enablement. Examiner asserts that the specification does not provide enablement for the terms "solvates." Applicants have amended claim 1, removing the term solvate. Applicants submit that the amendment addressed the rejection and requests that the rejection be withdrawn.

Claims 1, 3, 4, 6-9 and 11-18 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,790,850. Claims 1, 3, 6-9, 11, 13, 14, and 16 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5, 7, 10, 11, and 14-19 of co-pending Application No. 10/863,995. U.S. Patent No. 6,790,850 is the parent to Application No. 10/863,995 and therefore the cited references share a common specification. U.S. Patent No. 6,790,850 is the national phase application of WO 2001/25242, which is available as prior art to the pending application under 102(b). Moreover, the species referenced by the Examiner as being found in claim 4 of both cited references, 5-[[(2,3-Difluorophenyl)methyl]thio]-7-[(2-hydroxy-1,1-dimethylethyl)amino] thiazolo[4,5-d]pyrimidin-2(3H)-one, also appears in the specification as example 4. Applicants therefore submit that the above rejections could also be cited under 103(a) in light of publication WO 2001/25242, which shares a specification common to the cited references.

The pending claims are directed to the following compound, 5-[((2,3-difluorophenyl)methyl)thio]-7-{[(1S,2S)-2-hydroxy-1-(hydroxymethyl)propyl]amino}thiazolo[4,5-d]pyrimidin-2(3H)-one, which has two

stereocenters. Each of these stereocenters is fixed to provide an *S* configuration. Neither of the compounds disclosed in WO 2001/25242 (i.e., Examples 4 and 7) having a structure most similar to the claimed compound provide for a specified steroisomer. Applicants submit that nothing in the cited references teaches or suggests modification of the disclosed compounds so as to provide Applicants claimed compound, which is limited to a specific stereoisomer, with both stereocenters having an S configuration.

Moreover Applicants submit herewith a Declaration by Thomas McInally (the "Declaration"), which provides that the invention is based on the discovery that the claimed compound has an unexpectedly improved pharmacological profile relative to the structurally most similar compounds disclosed in WO 2001/25242 (i.e., Examples 4 and 7). When identifying an oral drug that would be effective at a relatively low dose and also minimize intersubject variability, it is desirable that the drug candidate have a combination of attributes including potency and bioavailability. When identifying desirable drug candidates in the CXCR2 project, the project team targeted a combination of a whole blood potency pIC50 (i.e., log IC50) of greater than 6[1] and a bioavailability of greater than 20%. (See Declaration, paragraph 8.) The claimed monosodium salt of formula (I) has the desired combination of attributes including a whole blood pIC50 of 6.3 and a bioavailability of at least 36%. (Id. Paragraph 13.) However, this combination of whole blood potency and bioavailability was not met by the prior art compounds. Example 4 fails to meet the desired pharmacological profile because it has a whole blood pIC50 of less than 6, and Example 7 fails to meet the desired pharmacological profile because it has a bioavailability of less than 20%. (Id. Paragraphs 11 and 12.)

As provided in the Declaration, one of ordinary skill in the art would not have been able to predict how to modify the compounds disclosed in WO 2001/25242 to arrive at a compound having the unexpected combination of whole blood potency and bioavailability as possessed by the claimed compound. (See Declaration, paragraph 13.) In light of the unexpected pharmacological profile of the claimed compound, Applicants submit that the pending claims are

[1] The whole blood potency can be calculated by multiplying the in vitro potency by the percentage of free fraction of the compound (i.e., that fraction not bound to plasma protein).

patentable over references cited above and request that the corresponding rejections be withdrawn.

Claims 1-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/528,316. Applicants request that this rejection remain a provisional rejection until the remaining rejections have been withdrawn in either this application or the cited copending application, thus placing at least one of the applications condition for allowance.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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